

Career Spotlight



CDC NERD Academy



Laboratory Scientist

A laboratory scientist uses laboratory equipment to analyze samples and substances. They can help collect and safely ship samples, perform laboratory testing, and interpret testing results. Laboratory scientists might also help develop and test new types of diagnostic and screening tests, often leading to new technology and more rapid and accurate results. They are committed to maintaining a safe and effective work environment and to generating accurate results in a timely fashion.



Meet Lily,
a laboratory scientist

Who do they work with?

Laboratory scientists often collaborate with medical doctors and public health experts.

Where do they work?

Laboratory scientists can work in different laboratories, such as clinical laboratories that are part of healthcare facilities, reference laboratories that perform diagnostic testing on samples it receives, and public health laboratories. Public health laboratories perform some diagnostic testing, reference testing, and disease surveillance and can focus on a wide range of topic areas, including bacteriology, virology, parasitology, toxicology, chronic disease, genetic testing, and newborn screening. Depending on the situation, they may work on a bench top or in a Biological Safety Level 4 “Hot Zone” Lab with maximum containment.

What skills do they use?

Laboratory scientists have skills in critical thinking, teamwork, management, attention to detail, and safety. Working in teams or independently, they manage time efficiently, carefully follow protocols, and problem solve as needed. Good motor skills such as eye-hand coordination are needed to perform technical laboratory procedures and protocols. Good data management and analysis skills are important for organizing and interpreting testing results.

What qualifications do they need?

Laboratory scientists often have at least a bachelor’s degree with a major in medical technology or in one of the life sciences. It’s helpful for them to have knowledge of molecular biology and microbiology techniques. There are also some opportunities for people with high school or associate degrees to work in testing laboratories.

